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## ABSTRACT

The concept of the "voice" as developed by Robert W, Firestone (1984 and later) has been hypothesized as an essential mechanism in self-destructive behavior in general and suicide in particular. This study applies the theory of the voice to the development of the Firestone Voice Scale for Self-Destructive Behavior (FVSSDB). The FVSSDB consists of 110 items equally drawn from 11 levels of progressively self-destructive thoughts. To investigate the reliability and validity of the FVSSDB, it was administered to 507 subjects currently in psychotherapy. Respondents also completed a battery of nine other instruments covering diverse areas of self-destructiveness in order to assess construct validity. Results were consistent with a Gutman scale of increasing self-destructiveness, providing support for the hierarchical and continuous nature of self-destructiveness. Construct validity was suggested by significant correlations between the levels and corresponding instruments. Criterion validity was supported by a high correlation of scores with past suicide attempts. Overall results reflect favorably on the voice theory and the hypothesis that assessing the level of destructive voices contributes to an understanding of suicide potential. (Contains 38 references and 2 figures.) (Author/SLD)

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# APPLICATION OF A THEORETICAL MODEL TO THE DEVELOPMENT OF A NEW INSTRUMENT FOR ASSESSING SELF-DESTRUCTIVE POTENTIAL: The Firestone Voice Scale for Self-Destructive Behavior

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## ABSTRACT

The concept of the "voice" as developed by Robert W. Firestone (1984; 1986; 1988; Firestone & Seiden, 1987) has been hypothesized to be an essential mechanism in self-destructive behavior in general and suicide, in particular. This study applies R. Firestone's theory of the "voice" to the development of the Firestone Voice Scale for Self-Destructive Behavior (FVSSDB).

The FVSSDB consists of 110 items equally drawn from 11 levels of progressively self-destructive thoughts. To investigate the reliability and validity of the FVSSDB, it was administered to 507 subjects currently in psychotherapy. Respondents also completed a battery of nine other instruments covering diverse areas of self-destructiveness, in order to assess construct validity.

The results were consistent with a Guttman scale of increasing self-destructiveness, providing support for the hierarchical and continuous nature of self-destructiveness. Construct validity of the FVSSDB was suggested by significant correlations between the levels and corresponding instruments. Criterion validity was supported by the high correlation of scores on the FVSSDB with past suicide attempts. Logistic regression revealed that the FVSSDB adds significantly to the ability to discriminate prior suicide attempts beyond the instruments used. Overall, the results reflect favorably on the "voice" theory and the original hypothesis that assessing the level of destructive "voices" contributes to an understanding of suicide potential.

## INTRODUCTION

Suicide is a problem of considerable magnitude. It is estimated that there are several hundred thousand suicide attempts in this country each year and that a total of 5 to 6 million individuals have made suicide attempts. In 1988, there were slightly more than 30,000 suicides annually (83 suicides per day, or 1 suicide every 17 minutes), with 12 of every 100,000 Americans killing themselves (National Center for Health Statistics, 1990). Follow-up studies have shown that 10-20% of suicide attempters who were hospitalized following the attempt go on to kill themselves within a 10-year period (Dorpat & Ripley, 1967). In addition, retrospective studies have shown that between 20 and 65% of those who kill themselves have a history of prior attempts. Dorwart and Chartock (1989) unequivocally stated that the best predictor of subsequent suicide attempts and completions is having a history of previous attempts. Jacobs (1989) states that "any suicidal behavior, regardless of severity, places a person at 10 to 100 times more than the normal risk for suicide" (p. 370).

An individual in the grip of a suicidal crisis is deeply ambivalent about taking his/her life. He/she is divided within him/herself; one part wants to live, while another part wants to die. As clinicians, it is our responsibility to appeal to and support the part of the person that wants to live. Leonard (1967) summarizes this sentiment by stating: "Their 'right' is not to commit suicide but to have their need for psychological assistance met so that they may enjoy a satisfying life among us" (p. 223).

The risk of suicide, including attempts and completions, is disproportionately high among mental health clients already in treatment (Nekanda-Trepka, Bishop, & Blackburn, 1983). Studies revealed that one in five practicing clinical psychologists will lose a client to suicide, and the number rises to one in two for psychiatrists (Chemtob, Hamada, Bauer, Kinney & Torigoe, 1988; Chemtob, Hamada, Bauer, Torigoe, & Kinney, 1988). Many factors have a potential to interfere with a clinician's judgment in the highly emotional situation of dealing with a client who is potentially suicidal.

Therapists tend to rely almost exclusively on intuitive sense to determine the dangerousness of a suicidal crisis (Maltzberger & Buie, 1989; Jobes, Eymann, & Yufit, 1990). Maltzberger (1986) also states that dangerous misjudgments can result from excessive reliance on clinical intuition. A comprehensive study (Bongar & Harnatz, 1989, 1990) found that only 40% of all graduate programs in clinical psychology provide any formal training in the study of suicide. Clinicians are often ill-equipped to deal with a client's suicidal crisis. They lack training as to how to cope with these life-and-death situations. Therefore, clinicians in particular need a prompt, easy to administer, and thorough clinical assessment strategy for assessing suicidal risk, as well as a conceptual model for understanding the suicidal individual.

The concept of the "voice," as developed by Dr. Robert W. Firestone, provides an innovative explanation of the underlying dynamics of self-destructive behavior. In particular, the "voice" has been hypothesized to be an essential mechanism in suicidal ideation and behavior (R. Firestone, 1986). The voice has been defined as an integrated system of negative thoughts and attitudes, antithetical to self and cynical toward others. The Firestone Voice Scale for Self-Destructive Behavior (FVSSDB) is an outgrowth of a comprehensive theory of psychopathology and a comparative model of mental health. An empirical study was undertaken by the present author to establish the scale's construct and criterion validity.

There are three premises underlying R. Firestone's approach to self-destructive behavior and suicide: (1) Self-destructive behavior exists along a

continuum encompassing those behaviors, communications, attitudes, or life-styles that are self-limiting, threatening, or antithetical to an individual's emotional well-being and physical health. These behaviors have been referred to by Firestone and Seiden (1987) as "microsuicidal." A number of theorists have supported this premise, including Menninger (1938), Farberow (1980), and Shneidman (1966). (2) Destructive "voices," ranging from mildly critical attitudes to malicious attacks on the self, exist in conjunction with the above premise. (3) There is a conflict within each individual between life-affirming propensities to actively pursue goals in the real world, and self-denying, self-protective, and eventually self-destructive tendencies that revolve around internal gratification through fantasy processes. The latter tendencies represent a defensive process within the personality. These incorporated parental attitudes come to have their own functional autonomy in the adult personality. Suicide represents the acting out of the extreme end of this self-destructive part of an individual. The "voice" is similar to Freud's (1921/1955) concept of an overly harsh super-ego and even more closely aligned with Guntrip's (1969) concept of an antilibidinal ego.

R. Firestone (1988) explained the split or internal division existing within each individual as consisting of the self-system and the anti-self system. The self-system is an individual's unique set of wants, desires, and priorities, based on his or her physical and mental attributes, as well as the identification with parents' positive traits that are harmoniously assimilated into the ego or self. The anti-self system is an integrated system of defensive, self-critical, and self-destructive attitudes internalized as the "voice." In other words, the voice process represents the incorporation and internalization of parents' negative attitudes and hostility that the child experienced while growing up. Thus, this alien posture toward self and others is originally imposed upon the personality from the external world; it persists into adult life and colors all interactions and pursuits.

Attitudes of self-hatred, microsuicide<sup>1</sup>, and suicidal propensities cannot be successfully integrated into the personality, since they are opposed to the ongoing life of the personality. If these forces as

1 "Microsuicide" refers to behaviors, communications, attitudes, or life-styles that are self-induced and threatening or inimical to an individual's physical health, emotional well-being, or personal goals (Firestone & Seiden, 1987).

hypothesized have as a function the ultimate destruction of the personality or even the physical life of the person, how can they be integrated into the personality they oppose? Furthermore, these thoughts and attitudes are not innate in the personality; instead they were imposed from without through the process of introjection and remain as an overlay on the personality.

The voice process as conceived by R. Firestone ranges from unconscious or subliminal to fully conscious. It represents a discordant force within the personality wherein the self becomes the object of attack and punishment. The dynamics predisposing the critical voice and self-destructive life-styles are multidetermined but focus on these principal areas: (a) the voice process involves the incorporation of parental attitudes and defenses (often unconscious); (b) the voice represents an attempt to protect the individual from feeling anxious and vulnerable through a complicated process of predetermining and rehearsing negative outcomes, thus discouraging the person from engaging in challenging behavior; (c) the voice has an additional defensive function in that it serves as a self-denying accommodation to death anxiety; and (d) lastly, and most importantly, it represents an "identification with the aggressor"—the introjection of parents' covert hostility.

In his ongoing investigations into the voice process, R. Firestone (1988) noted that subjects were able to trace the origins of their self-attacks to early family interactions. They identified critical voice statements as parental warnings, directions, labels, definitions, and feelings that they had assimilated into their own thinking process during their formative years.

Firestone and Seiden (1987) observed that self-attacks of the voice vary along a continuum of intensity from mild self-reproach to strong self-accusations and suicidal thoughts. The voice thus becomes the mechanism that regulates and dictates a person's self-denying, microsuicidal, and ultimately suicidal behavior.

Based on this theoretical approach, R. Firestone and the staff members of the Glendon Association, including the author, instituted plans to develop the Firestone Voice Scale for Self-Destructive Behavior. We initiated the project with the belief that we could develop a valuable instrument by assessing the depth and degree of the "voices" a person is experiencing. Indeed, it was believed that the scale would enhance

clinicians' ability to predict which individuals will commit suicide, without intervention. In addition, the theory underlying the scale provides clinicians with a comprehensive framework for investigating and understanding the problem of self-destructive behavior.

### ADVANTAGES OF THE FVSSDB

The FVSSDB is an instrument designed to assess the level of self-attacks a person is experiencing along the Continuum of Negative Thought Patterns (Firestone & Seiden, 1990). The items or statements on the FVSSDB consist of attacks underlying various levels of self-destructive behavior, ranging from self-denial, isolation, eating disorders, substance abuse, and self-mutilation, to actual injunctions to commit suicide.

Thus, it was believed the scale could be beneficial in providing information about each of these issues. For example, clinicians using the scale could determine the level at which a patient endorsed items with the highest frequency, thereby identifying the focus of self-destructive behavior for the individual.

Another potential advantage of the scale relates to the particular format in which the negative thoughts are stated on the questionnaire. By presenting the voice statements in the second person, the individual brings to the surface a partially subconscious process, allowing for greater insight and increased power to cope. In addition, understanding patients' voices contributes to immediate rapport. The scale provides a valuable window into the self-destructive process. In a 15-year longitudinal clinical study utilizing Voice Therapy as a laboratory procedure, R. Firestone (1986) observed that becoming conscious of self-destructive thoughts and attitudes gave individuals a measure of control over self-destructive behaviors that were previously acted out.

Answering the FVSSDB could also open up the client to discuss his/her negative cognitions with the therapist from the onset of therapy, a discussion that enhances the therapist's understanding of his or her client. The client's responses to the scale would provide valuable information about each person's self-destructive thought process, as well as his/her potential for serious self-destructive behavior.

Therefore, the FVSSDB is directly tied to a treatment approach. It facilitates the first step of Voice Therapy, which involves the person in identi-



fying his/her self-attacks. If the therapist were to proceed by encouraging the client to say these self-attacks out loud, further information could be gained as to the seriousness of the person's self-destructive potential. The therapist accomplishes this by asking the client to verbalize his/her negative thoughts in the second person, as though he/she were another person talking to the self. The intensity of angry affect associated with these attacks becomes obvious when they are verbalized. They indicate another important measurement of the strength of the incorporated hostile point of view. The scale accesses hostility in the Level 5 items (vicious self-abusive thoughts); the Level 9 items (injunctions to inflict injury on self); and, of course, Level 11 items (injunctions to carry out suicide plans). As stated earlier, the strength or intensity of voice attacks reflects the degree to which this negative aspect of the personality is dominant and the seriousness of one's potential for suicide.

To summarize, R. Firestone's (1988) approach to self-destructive behavior sets forth a conceptual model that therapists can utilize to better understand their patients. This model provides the therapist with ideas about the direction in which the therapy should proceed. The use of this instrument (the FVSSDB) in clinical settings as an adjunct to diagnosis leads naturally to the utilization of Voice Therapy procedures. In particular, it can be used as a therapeutic tool to help clients identify the extent and origins of their negative thought processes and to help therapists estimate clients' suicide potential.

### AIMS OF THE STUDY

The purpose of the research reported here was to investigate the reliability and validity of the Firestone Voice Scale for Self-Destructive Behavior. The hypothesis was that this scale would be able to discriminate those people with a past history of suicide from those without such a history and therefore relate closely to actual suicide potential, since a history of attempts greatly increases the person's risk of dying by suicide (Dorwart & Chartock, 1989; Jacobs, 1989). It was also hypothesized that the scale would identify where a person falls on a continuum of self-destructive potential, since the items on the scale include a broad spectrum of self-destructive thought patterns ranging from mild self-criticism to injunctions to commit suicide.

Another important reason for this research was to provide empirical support for the personality theory advanced by R. Firestone (1988), thus adding credence to a comprehensive perspective on human behavior and human interaction. If the scale displayed the capacity to successfully distinguish between various patterns of self-destructive behavior manifested by patients, it would provide this empirical support.

Information on the scale's ability to distinguish between various patterns of self-destructiveness was provided from two sources: one, a comparison of clients' scores on the levels of the FVSSDB with therapists' reports of the different forms of self-destructive behavior; and two, a comparison of scores with standard measures of these same self-destructive behavior patterns.

There are several scales which have been developed to assess elements of suicidal intention. Unfortunately, none has proven very effective in predicting suicide. This is partially due to the fact that suicide is such a low base rate phenomenon. It entails predicting which persons will exhibit a highly specific, very infrequently occurring behavior.

Clinicians have revealed that they rarely make use of suicide scales, feeling that they can rely on clinical intuition (Jobes, Eyman, & Yufit, 1990). Part of the reason for this may be that most of these self-report measures ask for the same information that is already gathered in a clinical interview and thus would not improve the clinician's ability to assess the person's suicide potential. However, as stated earlier, there are a multitude of factors which interfere with clinical judgment when dealing with suicidal individuals in particular (Maltsberger & Buie, 1989), making the use of clinical judgment alone potentially dangerous.

The Firestone Voice Scale for Self-Destructive Behavior takes a different approach from other scales by asking the respondent to reveal the negative attacks he or she experiences directed toward him or herself. The scale, by eliciting statements in the second person format, taps a partially unconscious process. This particular format also helps the person to begin separating his/her negative point of view from his/her own self-interest. It provides an opportunity for a person to develop insight into his/her self-critical thoughts and attitudes.

Most of the scales developed to assess suicide are empirically derived and gather information which has been found to be correlated with suicide. In contrast, the approach used here was based on assessing the voice process hypothesized to underlie suicidal behavior. The FVSSDB is much more broadly based than other measures of suicidality, covering a range of concepts related to suicide such as hopelessness, detachment, and isolation as well as a variety of self-destructive behavior patterns such as eating disorders and substance abuse. Thus, the FVSSDB may enhance our ability to predict suicide as well as identify a full range of self-destructive behavior patterns. In addition, it could provide clinicians with a comprehensive framework for understanding suicide and self-destructive behavior.

## **METHODS**

### **Subjects**

There were a total of 507 respondents. The subjects were geographically diverse, living in areas throughout the United States and Western Canada. Respondents were drawn from a variety of mental health settings and were all currently in psychotherapy. Sites included a center for recovering families, several drug treatment programs, local mental health clinics, and outpatient psychotherapy practices. Respondents ranged in age from 16 to 73, with an average age of 38. Of the participants, 169 were male (33%) and 338 were female (67%). The subjects were predominantly white (89%) even though a concerted effort was made to include minority subjects. The socioeconomic status of these subjects varied greatly with 51% earning under \$30,000; 26% earning in the range of \$30-50,000 and 19% in the above \$50,000 range. Respondents were asked to participate voluntarily after permission had been obtained from their therapist. It was found that the sample chosen included 93 persons who had made suicide attempts and 414 who had not.

### **Design**

All 507 subjects were administered a testing packet consisting of a Subject Consent Form, a Face Sheet of socio-economic information, and 10 instruments, including the FVSSDB, in random order. The therapists of these 507 subjects each filled out a therapist packet consisting of a Therapist Consent

Form, a Therapist Information Form developed for this study, and, if the patient had made a previous suicide attempt, the Intent Scale (Beck, Schuyler, & Herman, 1974).

### **Instrumentation**

In addition to socioeconomic information, the face sheet asked for mental health history on the subject's family of origin. Subjects were also asked to indicate whether they had engaged in self-harm or suicide attempts, or if anyone in their immediate families had demonstrated these behaviors (including completed suicide for family members). This information was used to help establish where the subject stood in relation to the "criterion variable" (whether or not they had a past history of suicide attempts).

Subjects were also asked to complete the Suicide Probability Scale (Cull & Gill, 1988); the Reasons for Living Inventory (Linehan, Goodstein, Nielsen, & Chiles, 1983); the Beck Hopelessness Scale (Beck & Steer, 1988); a 2-question subset of the Survey on Self-Harm (Favazza & Eppright, 1986); the Eating Disorders Inventory (Garner & Olmsted, 1984); the Inventory of Feelings, Problems & Family Experience (Cook, 1986) (which actually consisted of 3 tests, the Internalized Shame Scale, the Problem History Test, and the Family of Origin Scale); the Monitoring the Future Substance Use Battery (Bachman & Johnston, 1978); an 11-item Socially Desirable Response Set Measure (Hays, Hayashi, & Stewart, 1989); and the CES-D Depression Scale (Radloff, 1977).

### **Procedures**

The patient participants were administered the battery of tests in a private setting with the main researcher or a research assistant present. These researchers were present to answer questions and to communicate with subjects who might become disturbed by feelings aroused during the testing. As a precaution, if subjects appeared to be upset, the researcher notified the therapist to schedule an extra session for the subject shortly after testing. Following testing, Beck Hopelessness Scale and Suicide Probability Scale were scored within 24 hours, and the therapist was informed if any of the scores were in a range of concern.

## Results

Internal consistency reliability was evaluated by estimating Cronbach's (1951) alpha coefficient. This method is used in multi-item scales to indicate the degree of convergence between items hypothesized to represent the same construct or level. The results document a high level of internal consistency. The coefficient ranged from 0.78 for Level 2, (self-denial) to 0.97 for Level 11 (injunctions to commit suicide). The estimated internal consistency of the total scale was very high ( $\alpha = 0.98$ ).

A multi-trait, multi-item (MTMI) correlation matrix was computed using the Multitrait Analysis Program (Hays & Hayashi, 1990). A majority of the items in each level satisfied to 0.40 convergence recommended standard.

In order to examine the hierarchical theory of self-destructiveness represented by the FVSSDB, Guttman Scalogram Analysis was done using the microcomputer program scale (Gilpin & Hays, 1990). Level 9 (injunctions to self-harm) were excluded for this analysis since these items were endorsed with the least frequency of all levels. This reflects on the low base rate of self-mutilation behaviors and indicates that they are not a necessary precursor of suicide. The first three subscales were collapsed because they were indicated by the MTMI matrix to represent a single construct; they all represent forms of common, everyday voices. The scalability of responses was determined comparing observed patterns of data with the patterns predicted for a Guttman Scale (Figure 1). The level of prevalence observed varied somewhat from predictions, with Level 4 (isolation) receiving a higher prevalence than any other level. However, the coefficient of reproducibility (CR) was 0.91, with a value of 0.90 or higher considered acceptable. The coefficient of scalability (CS) for a slightly modified ordering of the levels (i.e., by difficulty) was 0.66 with a CS of 0.60 as a standard for acceptability. This finding indicates the levels are ordered along a single dimension.

Confirmatory factor analysis was performed using a computer program (Bentler, 1989). The results revealed three factors of increasing self-destructiveness that provide an adequate underlying model for the observed data (Figure 2). Level 6 (addictions) was separated out as related to the three factors (correla-

tions ranging from 0.38 to 0.48) but seeming to represent a separate concept.

Factor 1 included Level 1 (everyday self-criticisms), Level 2 (self-denial), Level 3 (cynicism), and Level 4 (isolation). All of these levels are directly representative of thoughts contributing to low self-esteem and inwardness. In addition, they represent commonly occurring thought patterns that most people can relate to, to varying degrees, as indicated by the high level of endorsement they received from the majority of subjects. Factor 1 was labeled Low Self-Esteem.

Factor 2 consists of Level 5 (vicious self-abusive thoughts) and Level 7 (thoughts engendering hopelessness). The statements from both of these levels represent the extreme of a self-hating point of view. Thus, Factor 2 was named Extreme Self-Hatred.

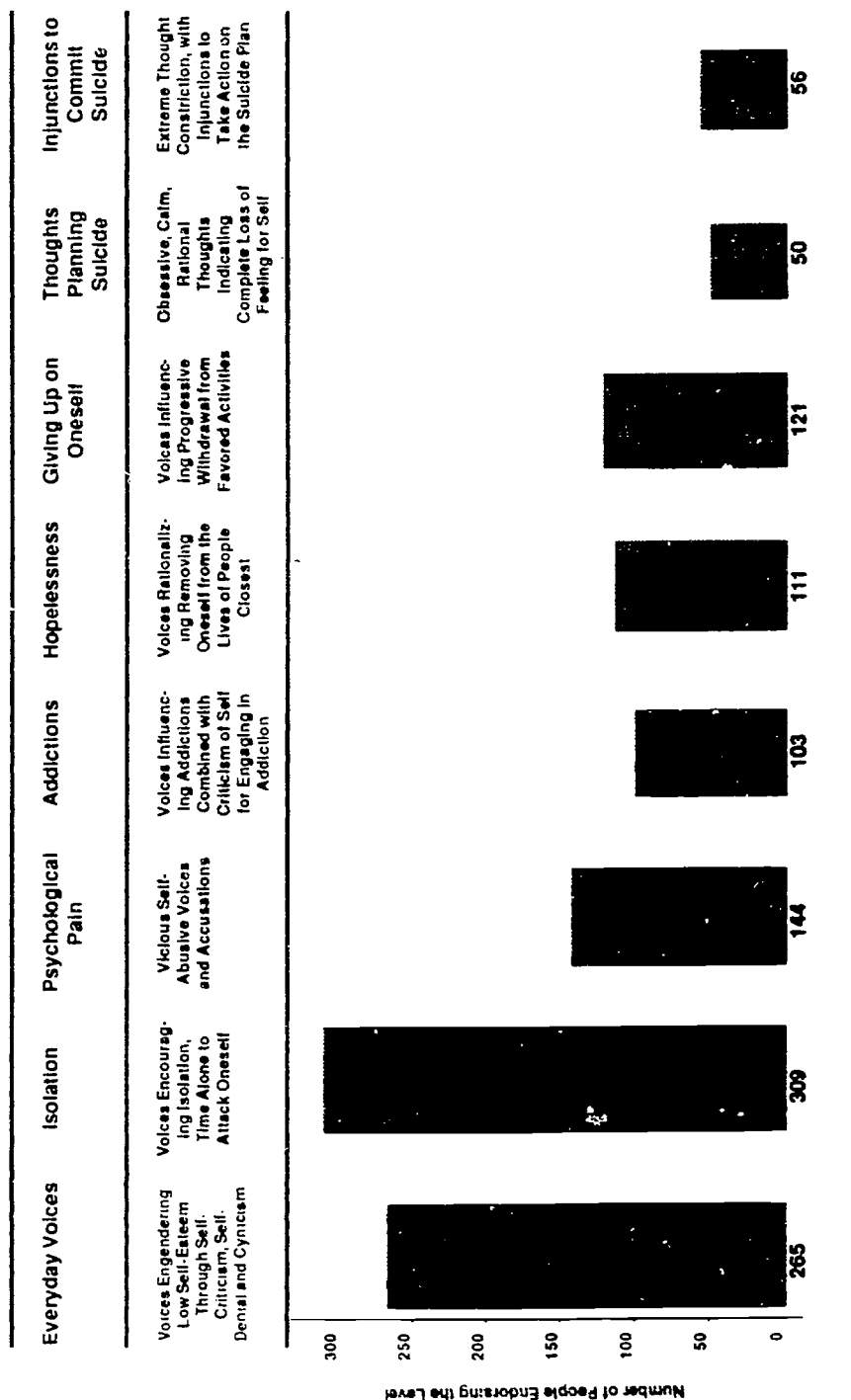
Factor 3 included Level 8 (giving up on oneself), Level 9 (injunctions to self-harm), Level 10 (thoughts planning suicide) and Level 11 (injunctions to suicide.) This cluster of levels represents the actual destruction of self, both psychologically and physically. Thus, Factor 3 was named Destruction of the Self.

Three forms of validity were examined for the FVSSDB, construct, criterion, and incremental validity. Two fundamental aspects of construct validity were explored, convergent and discriminate validity.

In order to identify the cut score for the total FVSSDB scale score that maximized its sensitivity and specificity to the probability of suicide, cross tabulation tables were developed between the various suicide scales, total score, and the "criterion variable" (suicide attempts as reported by both therapist and client.) The results revealed that 44% of the attempters scored in the top 20% of scores on the FVSSDB. In addition, 80% of the non-attempters group scored below this top 20% of scores. These findings supported the criterion validity of the FVSSDB.

In order to optimize specificity and sensitivity, a cut score of 24.4 was selected. This score has a specificity of 71% and a sensitivity of 61%. To verify the cut score selected, the sample was randomly divided and new cross-tabulation tables of FVSSDB scores (by the criterion variable) were developed for each half. The results supported the cut score chosen based on the whole sample.

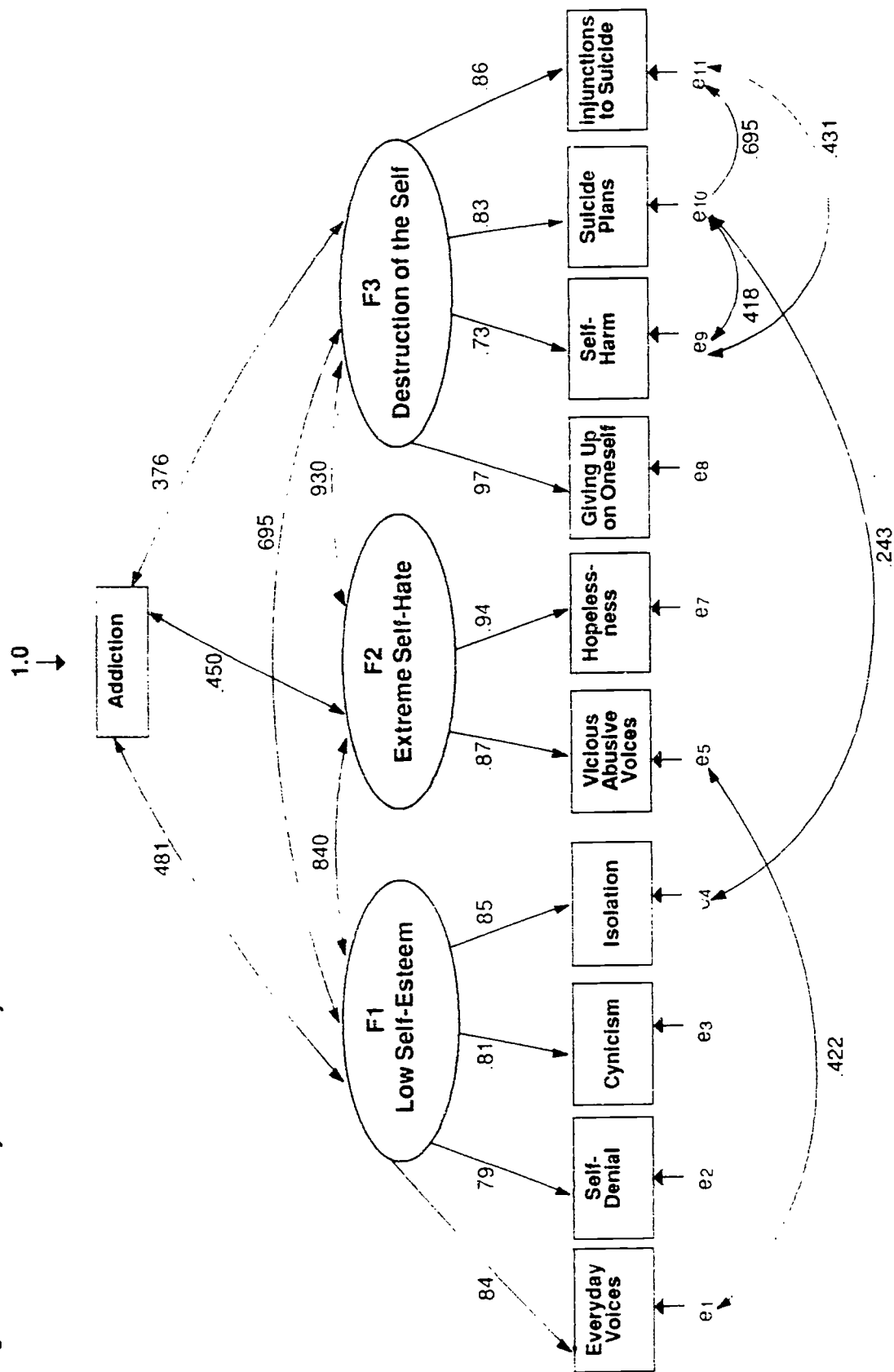
Figure 1. Guttman Scalogram Analysis for the FVSSDB



- N=507
- 2.5 Line of Endorsement (on average, a response between "rarely" and "once in a while" on each item in a level)
- Coefficient of Reproducibility = 0.905
- Coefficient of Scalability = 0.625



Figure 2. Confirmatory Factor Analysis of the FVSSDB



The FVSSDB total scale score was significantly correlated with the Suicide Probability Scale,  $r = 0.77$  ( $p < .05$ ); the Beck Hopelessness Scale,  $r = 0.60$  ( $p < .05$ ); the Eating Disorders Inventory,  $r = 0.62$  ( $p < .05$ ); the CES-D Depression Scale,  $r = 0.83$  ( $p < .05$ ); both parts of the Survey on Self-Harm, Self-Harm,  $r = 0.20$  ( $p < .05$ ), Self-Harm types,  $r = 0.42$  ( $p < .057$ ); the Internalized Shame Scale,  $r = 0.74$  ( $p < .05$ ); and the Problem History Scale total,  $r = 0.48$  ( $p < .05$ ).

The FVSSDB total scale score was also correlated significantly with therapist overall evaluation of the self-destructiveness of the clients,  $r = 0.40$ , ( $p < .05$ ).

It was predicted that the separate subscales of the FVSSDB would correlate with specific measures of the construct they purport to measure and that these correlations would be higher than those with other levels measuring distinct or different constructs. Level 10 (thoughts planning suicide) and Level 11 (injunctions to commit suicide) each correlated  $r = 0.69$  ( $p < .05$ ) with the SPS total score, and  $r = 0.80$  ( $p < .05$ ) with SPS suicidal ideation subscale. The therapists' reports of clients' suicidal ideation correlated significantly with Level 10  $r = 0.40$  ( $p < .05$ ), and with Level 11,  $r = 0.45$  ( $p < .05$ ).

Level 9 (injunctions to self-harm) had the highest correlation with the Survey on Self-Harm. The correlation with the Survey on Self-Harm types, was  $r = 0.52$  ( $p < .05$ ), and with the Survey on Self-Harm Times  $r = .025$  ( $p < .05$ ). Therapists' reports of clients' self-harm correlated  $r = 0.15$  ( $p < .05$ ) with Level 9. Level 7 (thoughts engendering hopelessness) and Level 8 (giving up on oneself) correlated  $r = 0.50$  ( $p < .05$ ) and  $r = 0.86$  ( $p < .05$ ), respectively, with the Beck Hopelessness Scale. In addition, they were both significantly correlated with the Hopelessness subscale of the SPS  $r = 0.78$  ( $p < .05$ ).

Therapists' reports of clients' hopelessness correlated with Level 7 and Level 8, both  $r = 0.33$  ( $p < .05$ ). The highest correlation for Level 6 (addictions) scores was with the addictions subscale of the Problem History Test,  $r = 0.64$  ( $p < .05$ ). In addition, Level 6 correlated  $r = 0.40$  ( $p < .05$ ) with the EDI. Therapists' reports of addictive behaviors also correlated with Level 6; therapists' reports of clients substance use correlated  $r = 0.33$  ( $p < .05$ ) and of eating disorders  $r = 0.17$  ( $p < .05$ ).

Level 5 (vicious self-abusive thoughts) had its highest correlation with the Internalized Shame Scale

total score,  $r = 0.75$  ( $p < .05$ ). Therapists' reports of clients' level of self hate were also significantly correlated with Level 5,  $r = 0.40$ , ( $p < .05$ ).

For Level 1 (self-critical voices), Level 2 (self-denial), Level 3 (cynical attitudes), and Level 4 (isolation), the highest correlations were with Internalized Shame Scale total scores  $r = 0.70, 0.60, 0.58$ , and  $0.60$  respectively, ( $p < .05$ ).

The criterion validity for the FVSSDB was evaluated by comparing FVSSDB scores with previous suicide attempts. The FVSSDB was found to have a higher correlation with the criterion variable (subjects' and therapists' reports of past suicide attempts)  $r = 0.31$  ( $p < .05$ ) than any of the other measures, including the Suicide Probability Scale,  $r = 0.26$ , and the Beck Hopelessness Scale,  $r = 0.18$ . Steiger ratios were calculated to estimate the significance of the difference of these correlations. The FVSSDB correlation with the criterion variable is significantly higher than all other measures except the SPS. Correlations for the FVSSDB Level 10 (thoughts planning suicide) and Level 11 (injunctions to suicide) had significantly higher correlations with the criteria than SPS.

In order to determine whether or not the FVSSDB could add significantly to our ability to determine suicide potential, logistic regression analysis was conducted to explore this aspect of incremental validity. A logistic regression coefficient was obtained using the variables SPS total score, BHS total score, age, income, gender, race, employment status, marital status as predictors. Subsequently, a logistic regression was run adding the FVSSDB total score. The difference in resulting logic coefficients was compared  $X^2 (1, N = 383) = 7.268$ ,  $p < .05$  and revealed a significant difference. Hence, the FVSSDB total score adds significantly to our ability to discriminate those persons who have made prior suicide attempts and therefore by inference represent a greater potential threat of actual suicide.

## DISCUSSION

The results of this study provide support for the reliability and validity of the Firestone Voice Scale for Self-Destructive Behavior. Most importantly, the criterion validity was demonstrated by the FVSSDB having a highly significant correlation with the subject's past suicide attempts. This correlation was significantly higher than all other instruments except the

SPS. This finding indicates that the FVSSDB is a valuable resource for clinicians needing to assess suicidal risk.

An unexpected but crucial finding of this research regards the reporting of this criterion variable (past suicide attempts). Of the 85 cases where subjects reported a history of suicide attempts, only 38 therapists were aware of this fact. In other words, for over half the subjects with this serious indication of future suicide potential, the therapist had apparently not asked this important question. Subjects were explicitly aware (having signed releases) that the testing information would be shared with their therapist, which implies that they were willing to tell the therapist about these prior suicide attempts. This finding lends support to the position that clinicians, to some degree, avoid dealing with the difficult topic of suicide. It also strongly supports the idea that clinicians would benefit from making greater use of instruments specifically addressing this topic.

The incremental validity analysis demonstrated that the FVSSDB adds significantly to the discrimination of prior suicide attempts and consequently to identifying suicide potential. The results from the construct validity aspect of the study support the notion that the levels of the FVSSDB may be used to evaluate self-destructive behavior along a continuum of negative thought patterns. Thus, the scale could allow clinicians to identify the area of focus of their client's self-destructive potential. This could prove helpful in diagnosis and treatment planning because the thoughts, when acted out, represent significant self-destructive behaviors which limit and shape a person's life. Therefore, the FVSSDB provides us with one instrument which can, on its own, assess a wide variety of areas of self-destructive behavior. This is important in two regards. First, a single test could take the place of an entire battery of instruments so that, with a minimum of work for both client and therapist, a significant amount of objective information could be gained. Secondly, these findings indicate that the FVSSDB has potential value as a pre-therapy screening device that could identify important areas of concern. The scale also could be utilized as a post therapy measure to assess shifts in symptoms, with the client hopefully moving toward less self-limiting and self-destructive behavior patterns.

Another interesting finding is that respondents reported it was easy to identify with the negative

thoughts as stated in the second person format on the FVSSDB. Subjects taking the test disclosed that on several occasions they felt they knew themselves better as a result of answering these questions. Statements such as "I see my patterns to be inward and isolated," or "I did not realize I was talking to myself so much," occurred a number of times. In addition, therapists reported clients often opened up in therapy in the weeks following testing. This took the form of expressing more emotions and bringing up topics not previously mentioned, for example, self-harm behavior.

The Confirmatory Factor Analysis of the FVSSDB was consistent with a structure of three high order factors with addictions as a separate entity. Conceptually, these three factors were interesting and consistent with the theory of self-destructiveness existing on a continuum postulated by R. Firestone and R. Seiden (Firestone & Seiden, 1990).

Factor 1 (Low Self-Esteem) consists of thoughts that compare the person unfavorably with others and point out his/her negative attributes. These result in feelings of self-doubt and wanting to avoid the security of others. Generally, they lead the person to seek gratification in fantasy as opposed to pursuing it in the real world. These thoughts result in increased inwardness and low self-esteem.

The second factor (Extreme Self-Hatred) consists of vicious and devastating accusations about the self which result in feelings of hopelessness and despair in relation to the person changing what they perceive as basic faults within themselves. This factor of extreme self-hatred appears to be an important step in an individual's progression toward becoming overtly self-destructive because the result is a great deal of emotional distress or perturbation.

The third factor (Destruction of the Self) encompasses a full range, from giving up on oneself (emotional suicide) to actual injunctions to commit suicide or actual destruction of the self (physical suicide). This factor represents the extreme end of the continuum of the internalized negative thought process and exemplifies why this negative overlay on the personality cannot be successfully integrated as a natural aspect of self.

The hierarchy of self-destructiveness represented by the FVSSDB was evaluated and generally supported by using Guttman Scalogram Analysis. Thus, the study provides some empirical support for the theoretical concept of embryonic suicide (Durk-

heim), indirect suicide (Farberow), and microsuicide (Firestone & Seiden). Understanding self-destructiveness in terms of a continuum is valuable in developing conceptualizations of clients. This finding is also consistent with the theory that a split exists within each person that varies in degree and depth but not in kind and that all self-destructive tendencies are regulated by inimical forces within the personality. In other words, self-destructive behavior is dictated by this internal thought process. The implication is that by helping clients gain access to their negative thoughts, therapists may be able to help them to identify the nature and degree of the split within themselves. Therapy procedures (such as Voice Therapy) based on identifying negative thought patterns would allow clients to gain mastery over the negative aspects of self and facilitate movement toward more fulfilling life-styles.

It would be important to conduct further research with the FVSSDB, in particular to initiate a 5- to 10-year longitudinal study to determine whether the instrument is valuable in predicting future suicide attempts. This particular study is very important for several reasons, one reason being that very few prospective studies have been undertaken in the field of suicide risk assessment. The only currently existing measures related to suicide potential that have been studied prospectively are those instruments developed by Beck (the BHS, SSI, and BDI). The research is understandably difficult to undertake because of the ethical issues surrounding suicidal risk identification and the obvious need to provide responsible treatment. However, a prospective study is an absolute necessity if suicide assessment instruments are to be more widely accepted and frequently used by clinicians.

## CONCLUSIONS

The Firestone Voice Scale for Self-Destructive Behavior is the outgrowth of a comprehensive theory of the underlying dynamics in self-destructive behavior. The scale appears to be a significant diagnostic tool that provides insight into destructive voices that negatively influence important areas of a person's functioning.

The study represents an important contribution to suicidology in that it combined a theoretical approach based on clinical data with rigorous empirical research. The positive results of the investigation of

reliability and of criterion and construct validity for the scale reflect back on the theory from which it was developed and tend to validate the theoretical constructs and hypotheses: first, the results support the hypothesis that a person's "voices" are directly related to self-destructive behavior in general and suicide in particular. Secondly, the original subjects in Voice Therapy groups identified these voices as coming directly from their parents, either as statements their parents made or as representative of the overall attitudes they perceived directed at them from their parents. (The items selected for the FVSSDB were gathered from clinical material, i.e., from the voice statements reported by these subjects.) These two findings in combination strongly support the theory that these destructive elements in the personality represent introjected parental attitudes.

The theory and scale represent a significant challenge to Freud's theory of an innate death instinct. The death wish as postulated by Freud appears not to be an instinctual force but rather represents an overlay on the personality incorporated originally from parents' covert aggression or hostility. Based on this reasoning, those who commit suicide would be acting out unconscious parental death wishes. Thus, the theory points to a different source of man's self-destructiveness than that proposed by Freud or Klein.

The FVSSDB scale and the constructs on which it is based appear to access the core issues involved in "man against himself." Clearly, the degree to which a person acts out self-destructive and/or suicidal impulses depends on a number of variables; however, this process appears to be strongly influenced by the depth, intensity, and pervasiveness of the voice process (Firestone & Seiden, 1990).

Suicidal persons have reached a level on the continuum where the hostile, alien point of view represented by the voice has become accepted as their own point of view. Suicidal clients adopt the prohibitions, directions, and injunctions of the voice as their own and totally believe the negative, self-depreciating statements of the voice about themselves and others. A progressive loss of contact with the real self, combined with seemingly hopeless estrangement from others, leads to a further submission to the voice. Increasingly aligning him/herself with the voice, the suicidal person reacts as if he/she were the incorporated other. The author agrees with Rosenbaum and Richman (1970) that if that other person or

parent wished him/her dead, he/she may well oblige by killing him/herself.

The value of the FVSSDB lies in its ability to determine, to a certain degree, the point at which the client's thinking currently exists on the continuum. Subsequently, the additional knowledge gained through accessing and identifying partially unconscious thought processes driving the suicidal individual toward death can well be used to set into motion potentially life-saving interventions.

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